

REMARKS

Claims 1-41 remain pending in the application.

The Applicants respectfully request the Examiner to reconsider earlier rejections in light of the following remarks. No new issues are raised nor is further search required as a result of the changes made herein. Entry of the Amendment is respectfully requested.

Objection of Claims 1, 2, 5, 9, 12, 16 and 34

Claims 1, 2, 5, 9, 12 and 16 were objected as allegedly containing phraseology that is not a positive limitation. In particular, the recited “adapted to” is not a positive limitation since it only requires the ability to perform a function. The Applicants respectfully disagree.

As the Examiner acknowledges the recited “adapted to” language is a limitation that requires the ability to perform a function, i.e., that is a positive limitation.

Moreover, MPEP §2173.05(g) directs the Examiner to evaluate and consider a functional limitation for “what it fairly conveys to a person of ordinary skill in the pertinent art in the context in which it is used”(Emphasis added).

The limitation considered in *In re Hutchison* was “adapted to be adhered to a metal backing element for use in the fabrication of a template or the like”, *Id.* at 140 (Emphasis added). The C.C.P.A. has held that “...the introductory clause to the effect that the laminated article is “adapted” for use in making a template or the like ***does not constitute a limitation in any patentable sense..”, *Id.* at 141 (italicizing original, underlining added).

As the MPEP §2173.05(g) correctly points out, the C.C.P.A. later provided a further clarification on the issue of functional limitations in *In re Venezia*, 189 USPQ 149 (C.C.P.A. 1976). In considering a limitation, “a pair of sleeves....each sleeves of said pair adapted to be fitted over the insulating jacket of one of said cables.”, *Id.* at 151, the court held:

“Rather than a mere direction of activity to take place in the future, this language imparts a structural limitation to the sleeve. *** A similar situation exists with respect to the “adapted to be affixed” and “adapted to be positioned” ***

“may be slideably positioned” *** “slideably positioned” ***
this language also defines present structure or attributes ****
a present structural configuration of the housing is defined in
accordance with how the housing interrelates with the other
structures in the completed assembly. We see nothing
wrong in defining the structures of the components of the
completed connector assembly in terms of the
interrelationship of the components, or the attributes they
must possess *** One skilled in the art would have no
difficulty determining whether or not a particular collection of
components infringe the collection of interrelated
components defined by these claims.”, Id. at 151-152
(Emphasis added).

The Applicants’ recitations, e.g., “a client device having stored therein a client application adapted to be executed by said client device” (claim 1) relates to the function of the client device when executing a client application. Of course, infringing devices may be sold in an unpowered state, and therefore would be ‘adapted to’ execute a client application.

Claim 34 was objected to as allegedly containing a minor spelling error. The Examiner alleges the recited “underling” should be “underlying”.

Claim 34 is amended herein to recite “underlying”.

Accordingly, it is respectfully requested that the objection of claims 1, 2, 5, 9, 12, 16 and 34 be withdrawn.

35 USC 112 Second Paragraph Rejection of Claim 36

The Office Action rejected claim 36 as allegedly being indefinite under 35 USC 112.

Claim 36 have been reviewed and is amended where appropriate. It is respectfully submitted that claim 36 is now in full conformance with 35 USC 112. It is respectfully requested that the rejection be withdrawn.

Claims 1-4, 19, 22-24, 27-29, 32 and 33 over Ramasubramani in view of Boyle

In the Office Action, claims 1-4, 19, 22-24, 27-29, 32 and 33 were rejected under 35 U.S.C. §103(a) as allegedly being obvious over U.S. Patent No. 6,507,589 to Ramasubramani et al. ("Ramasubramani") in view of U.S. Patent No. 6,138,158 to Boyle et al. ("Boyle"). The Applicants respectfully traverse the rejection.

Claims 1-4 recite a protocol gateway comprising a means for authenticating an origin of a message, wherein the authenticating means authenticates the origin before the message is routed by a message router, and a database, which is accessible by a message router and adapted to store information relating to routing and authentication of the message.

The Examiner provides general motivation of why one of ordinary skill in the art would authenticate the origin of a message, but has still failed to provide motivation why one of ordinary skill in the art would have modified Ramasubramani's protocol gateway to perform such a function.

The Examiner alleges that Boyle is relied on to "merely show that authenticating the origin of messages was well known in the art at the time of the invention, and thus, given the teachings of Boyle, it would have been obvious to a person of ordinary skill in the art, at the time of the invention, to modify the teachings of Ramasubramani in order to show the protocol gateway taught by Ramasubramani ...would have verified the integrity of the message by ensuring that the message is valid, authorized, and unaltered, before establishing communication message" (Office Action, page 4). The Office Action points to Boyle, col. 2, lines 29-56 for support of the allegation (Office Action, page 4).

As Applicants previously argued, Boyle discloses a link server device that utilizes a device ID to obtain updates. Boyle fails to even mention use of a protocol gateway. The Examiner is taking the disclosure of Boyle out of context. The Examiner potentially may be able to find numerous devices that generally disclose authenticating the origin of messages, the Applicants are not disputing such. However, the Applicants are **NOT** claiming just any device

authenticating the origin of messages, but specifically a protocol gateway. Since Applicants' protocol gateway and Boyle's link server are two completely different devices performing completely different functions, the Examiner has still failed to provide a single reference that discloses or suggest a protocol gateway authenticating the origin of messages.

Moreover, even if Boyle is relied on to disclose authenticating the origin of a message (which as discussed above is improperly taken out of context of the claim), "Teachings of references can be combined only if there is some suggestion or incentive to do so." In re Fine, 5 USPQ2d 1596,1600 (Fed. Cir. 1988) (quoting ACS Hosp. Sys. v. Montefiore Hosp., 221 USPQ 929, 933 (Fed. Cir. 1984)) (emphasis in original). The Examiner has not provided motivation why one of ordinary skill in the art would modify Ramasubramani to authenticating the origin of a message, much less a protocol gateway. Ramasubramani fails to disclose or suggest any type of need to be modified to authenticate the origin of a message. Thus, modification of Ramasubramani would not cure any disclosed deficiencies that would benefit from the alleged modification.

Moreover, the Examiner alleges the motivation to authenticate the origin of a message is to "verify the integrity of the message by ensuring that the message is valid, authorized, and unaltered, before establishing a communication message" (Office Action, page 4). However, authenticating the origin of the message would not ensure that the message is valid, authorized and unaltered. During the course of transmission, the message could have been invalidated and altered but still contain valid information about the origin of the message. A message containing origin information does not automatically indicate the message is authorized. Thus, none of the Examiner purposes to authenticate the origin of a message would fulfill the Examiner's allegations, much less fulfill some type of need in Ramasubramani to perform such authentication.

Moreover, Boyle simply checks to see if a request for an update ID matches an ID in a local database. This procedure still fails to authenticating the

origin of a message, i.e., to determine if an indicated origin of a message actually sent the message. Boyle simply authenticates access to an update based on an origin ID of a message.

Boyle discloses a link server device that utilizes a device ID to obtain updates. Thus, since Boyle fails to disclose or suggest application of any of the teaching from a link server device to protocol gateway. Ramasubramani theoretically modified by the disclosure of Boyle would still result in a protocol gateway working in conjunction with a link server device checking a device ID requesting an update to an ID in a local database. The theoretical modification of Ramasubramani with Boyle would still fail to disclose or suggest a protocol gateway authenticating the origin of a message, as recited by claims 1-4.

Neither Ramasubramani nor Boyle disclose or suggest use of a protocol gateway authenticating a message (as acknowledged by the Examiner), and thus Ramasubramani modified by Boyle would still fails to disclose or suggest a protocol gateway authenticating a message, as recited by claims 1-4.

Claims 19, 22-24, 27-29, 32 and 33 recite a method and apparatus authenticating an origin of a message before the message is routed by a message router between a protocol gateway and a server.

The Examiner acknowledges that Ramasubramani fails to disclose authenticating an origin of a message before the message is routed, and a database relating the routing and authentication of the message (Office Action, page 24). The Office Action relies on Boyle to allegedly make up for the deficiencies in Ramasubramani to arrive at the claimed features. The Applicants respectfully disagree.

As discussed above, and as acknowledged by the Examiner, Boyle fails to disclose a protocol gateway. Thus, Boyle can not make up for the deficiencies in Ramasubramani since failing to disclose or suggest use of a protocol gateway, much less a method and apparatus authenticating an origin of a message before the message is routed by a message router between a protocol gateway and a server, as recited by claims 19, 22-24, 27-29, 32 and 33.

Moreover, as discussed above, even if Boyle is relied on to disclose authenticating the origin of a message (which as discussed above is improperly taken out of context from the disclosure of Boyle which **fails to perform such a function**), “Teachings of references can be combined only if there is some suggestion or incentive to do so.” In re Fine, 5 USPQ2d 1596,1600 (Fed. Cir. 1988) (quoting ACS Hosp. Sys. v. Montefiore Hosp., 221 USPQ 929, 933 (Fed. Cir. 1984)) (emphasis in original). The Examiner has not provided motivation why one of ordinary skill in the art would modify Ramasubramani to authenticating the origin of a message, much less before the message is routed by a message router between a protocol gateway and a server. Ramasubramani fails to disclose or suggest any type of need to be modified to authenticate the origin of a message. Thus, modification of Ramasubramani would not cure any disclosed deficiencies that would benefit from the alleged modification.

Moreover, Boyle simply checks to see if a request for an update ID matches an ID in a local database. This procedure still fails to authenticating the origin of a message, i.e., to determine if an indicated origin of a message actually sent the message. Boyle simply authenticates access to an update based on an origin of a message.

Neither Ramasubramani nor Boyle disclose or suggest use of a **protocol gateway** authenticating a message (as acknowledged by the Examiner), and thus Ramasubramani modified by Boyle still fails to disclose or suggest a method and apparatus authenticating an origin of a message before the message is routed by a message router between a protocol gateway and a server, as recited by claims 19, 22-24, 27-29, 32 and 33.

Accordingly, for at least all the above reasons, claims 1-4, 19, 22-24, 27-29, 32 and 33 are patentable over the prior art of record. It is therefore respectfully requested

Claims 5, 34 and 35 over Ramasubramani in view of Frailong

In the Office Action, claims 5, 34 and 35 was rejected under 35 U.S.C. §103(a) as allegedly being obvious over Ramasubramani in view of U.S.

Patent No. 6,138,158 to U.S. Patent No. 6,012,100 to Frailong et al. ("Frailong"). The Applicants respectfully traverse the rejection.

Claims 5, 34 and 35 recite a remotely manageable protocol gateway.

The Examiner acknowledges that Ramasubramani fails to disclose a remotely manageable protocol gateway. The Office Action relies on Frailong to allegedly make up for the deficiencies in Ramasubramani to arrive at the recited features. The Applicants respectfully disagree.

The Examiner acknowledges that Ramasubramani fails to disclose remotely manageable protocol gateway. However, the Examiner alleges that Frailong disclose a gateway being remotely manageable (Office Action, page 11). Therefore, by the Examiner own acknowledgement, Frailong fails to make up for the deficiencies in Ramasubramani and fails to disclose a remotely manageable protocol gateway, as recited by claims 5, 34 and 35.

Moreover, the Examiner's motivation to modify the disclosure of Ramasubramani with the disclosure of Frailong is unfounded. The Examiner alleges modifying the disclosure of Ramasubramani with the disclosure of Frailong would minimize the clients responsibilities by configuring and maintaining the protocol gateway remotely (Office Action, page 11). However, conventionally protocol gateways require a technician, not a client, to travel in the field to the protocol gateway to perform any maintenance. A protocol gateway is responsible for, e.g., conversion of protocols between networks, and therefore require updates when protocol updates are needed. Frailong fails to disclose a protocol gateway, and therefore fails to disclose remotely managing any functions related to a protocol gateway.

Moreover as discussed above, "Teachings of references can be combined only if there is some suggestion or incentive to do so." In re Fine, 5 USPQ2d 1596,1600 (Fed. Cir. 1988) (quoting ACS Hosp. Sys. v. Montefiore Hosp., 221 USPQ 929, 933 (Fed. Cir. 1984)) (emphasis in original). The Examiner has not provided motivation why one of ordinary skill in the art would modify Ramasubramani with the disclosure of Frailong that fails to even mention

a protocol gateway. Ramasubramani fails to disclose or suggest any type of need to modify a protocol gateway to be remotely manageable. Thus, modification of Ramasubramani would not cure any disclosed deficiencies that would benefit from the alleged modification.

Neither Ramasubramani nor Frailong disclose a remotely manageable protocol gateway (as acknowledged by the Examiner), nor suggest a protocol gateway be modified to be **remotely manageable**, as recited by claims 5, 34 and 35.

Accordingly, for at least all the above reasons, claims 5, 34 and 35 are patentable over the prior art of record. It is therefore respectfully requested

Claims 6-11 over Ramasubramani in view of Failong and Boyle

In the Office Action, claims 6-11 were rejected under 35 U.S.C. §103(a) as allegedly being obvious over Ramasubramani in view of Frailong, and further in view of U.S. Patent No. 6,138,158 to Boyle et al. ("Boyle"). The Applicants respectfully traverse the rejection.

Claims 6-11 are dependent on claim 5, and are allowable for at least the same reasons as claim 5.

Claims 6-11 recite a remotely manageable protocol gateway.

As discussed above, Ramasubramani in view of Frailong fails to disclose or suggest a remotely manageable protocol gateway, as recited by claims 6-11.

The Office Action relies on Boyle to allegedly make up for the deficiencies in Ramasubramani in view of Frailong to arrive at the claimed invention. The Applicants respectfully disagree.

Boyle appears to disclose a link server device that connects a client device and a Web server device (Fig. 2). The link server services a narrowband channel and a wideband channel connected to a client device (Boyle, Fig. 2). However, Boyle fails to disclose or suggest that the link server is remotely manageable, much less disclose or suggest a remotely manageable protocol gateway, as recited by claims 6-11.

Ramasubramani modified by the disclosure of Frailong and Boyle would still fail to disclose, teach or suggest a remotely manageable protocol gateway, as recited by 6-11.

Neither Ramasubramani, Frailong nor Boyle disclose a remotely manageable protocol gateway (as acknowledged by the Examiner), nor suggest modifying a protocol gateway to be remotely manageable, as recited by claims 6-11.

Accordingly, for at least all the above reasons, claims 6-11 are patentable over the prior art of record. It is therefore respectfully requested.

Claims 12-18 over Ramasubramani in view of Mann and Claims 36-41 over Mann in view of Ramasubramani

In the Office Action, claims 12-18 were rejected under 35 U.S.C. §103(a) as allegedly being obvious over Ramasubramani in view of Mann et al. U.S. Patent No. 5,167,035 ("Mann"), and claims 36-41 were rejected under 35 U.S.C. §103(a) as allegedly being obvious over Mann in view of Ramasubramani. The Applicants respectfully traverse the rejection.

Claims 12-18 recite a method segmenting a message into one or more message segments on a client device, none of the message segments exceeding a maximum segment size and determining that at least one message segment constitutes a complete message by the client device.

The Examiner acknowledges that Ramasubramani fails to disclose segmenting a message into one or more message segments within one of a plurality of client devices, none of the message segments exceeding a maximum segment size and determining that at least one message segment constitutes a complete message at one of the plurality of client devices (Office Action, page 15).

The Examiner alleges that Mann is relied on "to merely show that message segmentation was well known in the art at the time of the invention" (Office Action, page 6). And, "being that client devices, servers, and gateways all have similar functionality, given the teachings of Mann, it would have been

obvious to a person of ordinary skill in the art ...to modify the teachings of Ramasubramani in order to ..” arrive at the claimed features. The Applicants respectfully disagree.

The Examiner acknowledges that Mann fails to disclose segmenting a message by a client device into a maximum segment size. Thus, neither Ramasubramani nor Mann disclose or suggest segmenting a message by a client device into a maximum segment size, much less none of the message segments exceeding a maximum segment size and determining that at least one message segment constitutes a complete message at one of the plurality of client devices, which the Examiner has failed to even address by prior art.

Moreover, the Examiner allegation that client devices, servers, and gateways all have similar functionality is nonsensical and unsupported. If client devices, servers, and gateways have similar functionality, then they would all be known within the art as a single term, either a client devices, servers, and gateways. Client devices, servers, and gateways all perform very specific functions within a data network and are not interchangeable.

Moreover as discussed above, “Teachings of references can be combined only if there is some suggestion or incentive to do so.” In re Fine, 5 USPQ2d 1596,1600 (Fed. Cir. 1988) (quoting ACS Hosp. Sys. v. Montefiore Hosp., 221 USPQ 929, 933 (Fed. Cir. 1984)) (emphasis in original). The Examiner has not provided motivation why one of ordinary skill in the art would modify Ramasubramani with the disclosure of Mann. Ramasubramani fails to disclose or suggest any type of deficiency within the art that would benefit from a modification segmenting a message by a client device into a maximum segment size. Thus, modification of Ramasubramani would not cure any disclosed deficiencies that would benefit from the alleged modification.

Moreover, the claims specifically recite a client device performing segmenting into a maximum segment size. The Examiner making general statements that Mann is not relied on to disclose that the client device is performing the segmenting is improper. The Applicants are not arguing that as a general proposition segmenting has never been performed within the art. To the

contrary, the Applicants are specifically claiming a client device segmenting a message into a maximum segment size. Respectfully, the Examiner is apparently ignoring an important feature of the claims, i.e., that it is a client device that is performing the segmenting into a message into a maximum segment size.

Moreover, the Examiner has failed to provide the desirability, as disclosed by Ramasubramani, for such a modification. The Examiner cites motivation from Mann for modifying Ramasubramani. However, it is the desirability of modifying Ramasubramani that is at issue, not the desirability of such use by Mann that discloses such a feature. Mann discloses the desirability of modifying a server, failing to disclose a desirability of modifying a client device. "The mere fact that the prior art may be modified in the manner suggested by the Examiner does not make the modification obvious unless the prior art suggested the desirability of the modification." In re Fritch, 23 USPQ2d 1780, 1783-84 (Fed. Cir. 1992). The Examiner has failed to indicate a shortcoming in Ramasubramani that would benefit from modifying Ramasubramani to perform the recited features.

Neither Ramasubramani nor Mann disclose a client device performing segmenting into a maximum segment size (as acknowledged by the Examiner), nor suggest the modification of a client device to perform segmenting into a maximum segment size, as recited by claims 12-18.

Claims 36-41 recite a method of segmenting a message into one or more message segments on a client device, none of the message segments exceeding a maximum segment size and determining that at least one message segment constitutes a complete message by the client device.

The Examiner acknowledges that Mann fails to disclose transmitting from a protocol gateway to a message router a complete message (Office Action, page 29). The Examiner relies on Ramasubramani to allegedly make up for the deficiencies in Mann to arrive at the recited features. The Applicants respectfully disagree.

The reason Mann fails to disclose transmitting from a protocol gateway to a message router a complete message (as acknowledged by the Examiner) is because Mann fails to disclose a gateway, much less a protocol gateway, much less transmitting from a protocol gateway to a message router a complete message.

As discussed above, "Teachings of references can be combined only if there is some suggestion or incentive to do so." In re Fine, 5 USPQ2d 1596,1600 (Fed. Cir. 1988) (quoting ACS Hosp. Sys. v. Montefiore Hosp., 221 USPQ 929, 933 (Fed. Cir. 1984)) (emphasis in original). The Examiner has not provided motivation why one of ordinary skill in the art would modify Mann with the disclosure of Ramasubramani. Mann fails to utilize a protocol gateway because a protocol gateway would serve no purpose in the system. Thus, modification of Mann would not cure any disclosed deficiencies that would benefit from the alleged modification.

The Examiner's motivation to modify Mann is that it would create a more robust and attractive system to users who wish to communicate with networks having different network characteristics (Office Action, page 30). However, the Examiner is modifying Mann with the disclosure of Ramansubramani, not Ramansubramani with the disclosure of Mann. Modifying Mann that has no need for a protocol gateway with a protocol gateway is nonsensical. Without a need for a protocol gateway, the Examiner has failed to detail how adding a protocol gateway to Mann would make the system more robust and attractive.

Accordingly, for at least all the above reasons, claims 12-18 and 36-41 are patentable over the prior art of record. It is therefore respectfully requested that the rejection be withdrawn.

Claims 20, 21, 25, 26, 30 and 31 over Ramasubramani in view of Boyle and Attanasio

In the Office Action, claims 20, 21, 25, 26, 30 and 31 were rejected under 35 U.S.C. §103(a) as allegedly being obvious over Ramasubramani in view of Boyle, and further in view of U.S. Patent No. 5,371,852 to Attanasio et al. ("Attanasio"). The Applicants respectfully traverse the rejection.

Claims 20, 21, 25, 26, 30 and 31 are dependent on claims 19, 24 and 29, and are allowable for at least the same reasons as claims 19, 24 and 29.

Claims 20, 21, 25, 26, 30 and 31 recite a method and apparatus authenticating an origin of a message before the message is routed by a message router between a protocol gateway and a server.

The Examiner acknowledges that Ramasubramani fails to disclose authenticating an origin of a message before the message is routed, and a database relating the routing and authentication of the message (Office Action, page 24). The Office Action relies on Boyle and Attanasio to allegedly make up for the deficiencies in Ramasubramani to arrive at the claimed features. The Applicants respectfully disagree.

As discussed above, Ramasubramani modified by the disclosure of Boyle fails to disclose or suggest a method and apparatus authenticating an origin of a message before the message is routed by a message router between a protocol gateway and a server, as recited by claims 20, 21, 25, 26, 30 and 31.

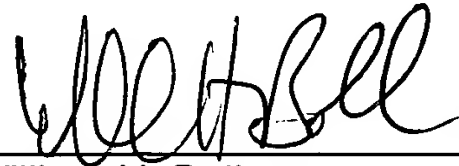
Attanasio is relied on to disclose load balancing across servers in a computer network (Office Action, page 27). Thus, even with a disclosure of load balancing across servers in a computer network, Ramasubramani modified by Boyle and Annasio still fails to disclose or suggest a method and apparatus authenticating an origin of a message before the message is routed by a message router between a protocol gateway and a server, as recited by claims 20, 21, 25, 26, 30 and 31.

Accordingly, for at least all the above reasons, claims 20, 21, 25, 26, 30 and 31 are patentable over the prior art of record. It is therefore respectfully requested.

Conclusion

All objections and rejections having been addressed, it is respectfully submitted that the subject application is in condition for allowance and a Notice to that effect is earnestly solicited.

Respectfully submitted,
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A handwritten signature in black ink, appearing to read 'William H. Bollman', written over a horizontal line.

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